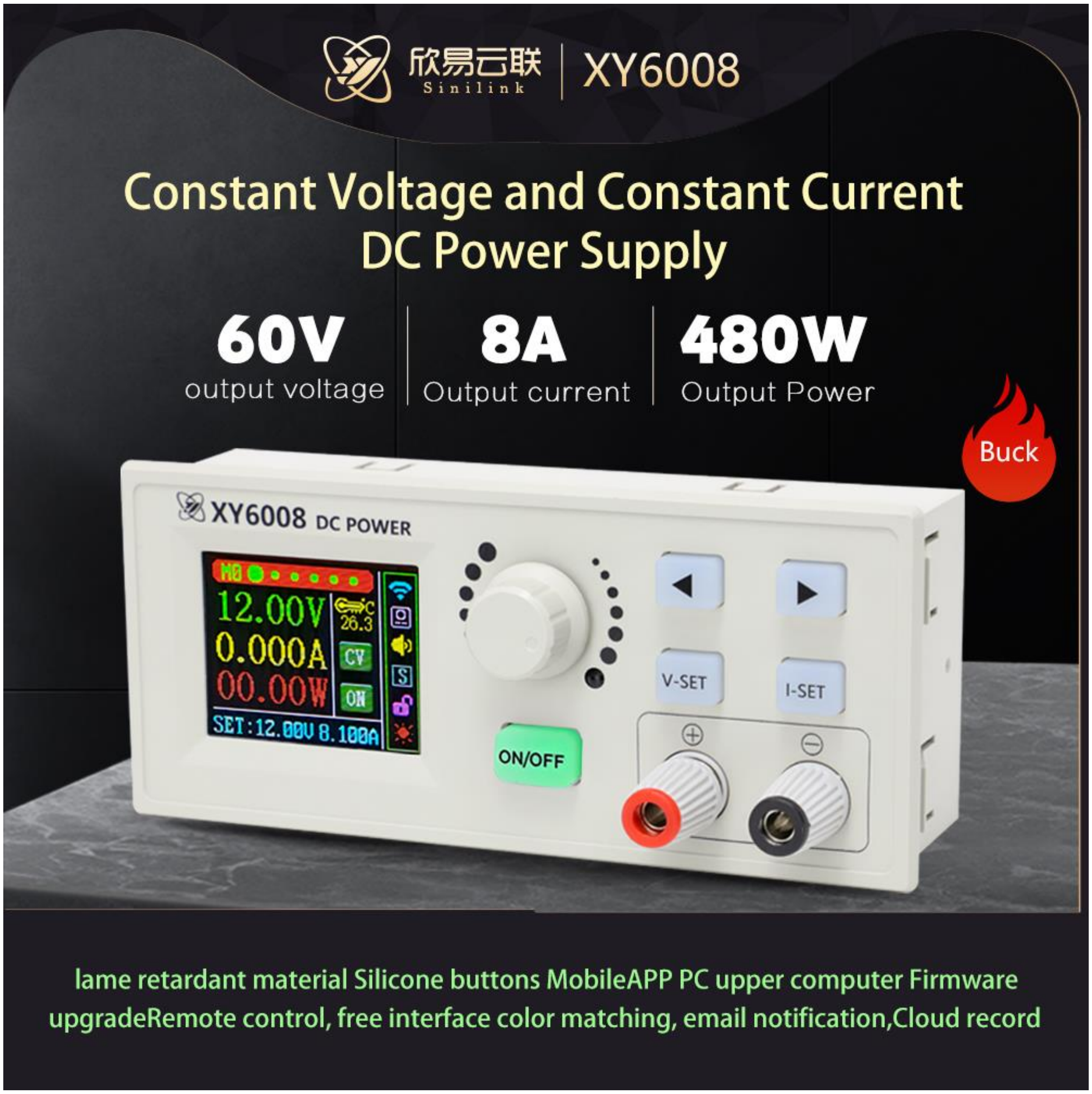
Constant voltage Constant current DC Power Supply



Content

1. Product technical indicators

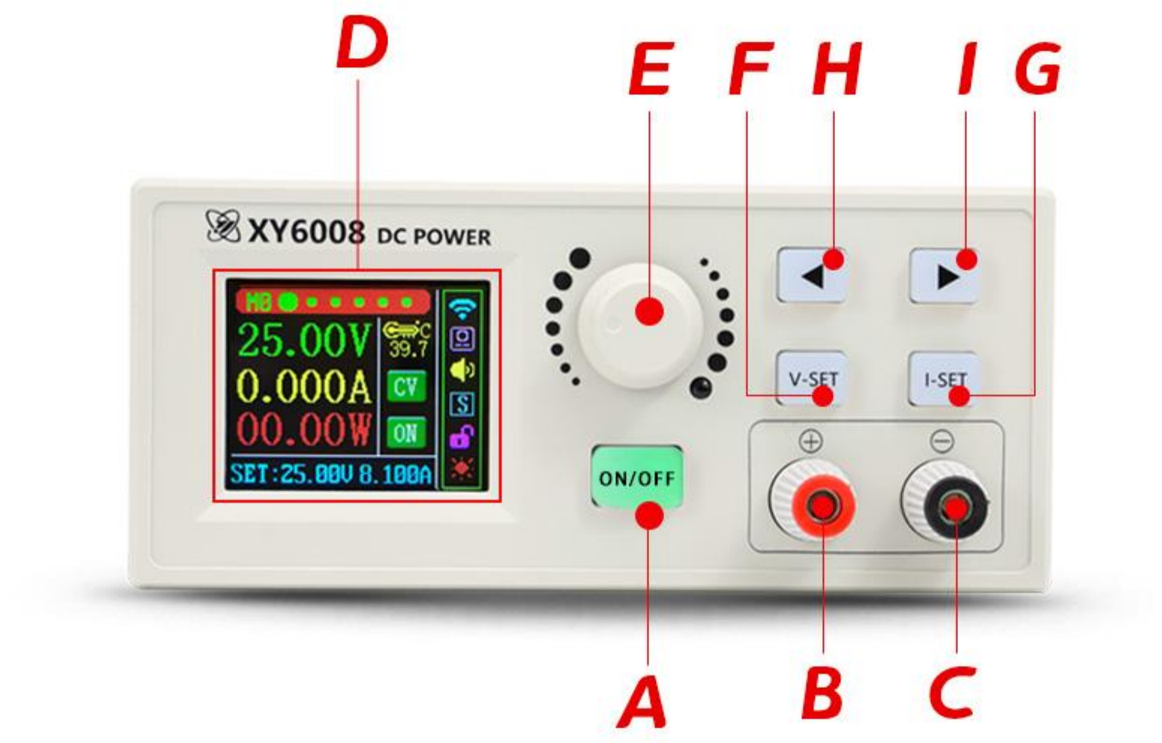
product model	XY6008	XY6008-W
input voltage range	6~60.00V	
Output voltage range	0~60.00V	
Output current range	0~8.000A	
Output power range	0~480.0W	
Input voltage measurement resolution	0.01V	
The output voltage sets the measurement resolution	0.01V	
Current sets the measurement resolution	0.001A	
Input voltage measurement accuracy	±(1‰+5 words)	
Output voltage setting and measurement accuracy	±(0.4‰+1 words)	
Output current setting and measurement accuracy	±(0.5‰+3 words)	
Output a ripple typical value	100mV VPP	
Product operating temperature range	-10℃~40℃	
Capacity measurement range	0~99999Ah	
Energy measurement range	0~99999Wh	
Capacity and energy statistical error	±2‰	
Run-time measurement range	0~1000h	
maximum output voltage	(input voltage ÷1.1)-2	
The heat dissipation fan opens	current>2A power>50W temperature>50℃	
Close after the cooling fan is on	current<1.5A power<45W temperature<45℃	
Overtemperature protection	acquiesce in 110℃	
Screen brightness settings	0~5 A total of 6 levels	
display screen	A 1.8-inch color LCD display	
Include packaging weight	257g	
product size	125mm*55mm*35mm	
Is the TTL communication supported	yes	
Is the infrared remote control supported	yes	
Is the WiFi communication supported	No	yes
Support for the clock + weather	No	yes
Whether the timing function is supported	No	yes
Whether to support the cloud data record + WeChat notification	No	yes

2.Core function

Infrared remote control + coding potentiometer + silicone button combination adjustment	Firmware update, later support for more functionality
Firmware update, later support for more functionality	New PC-side host computer software
1.8 inch high-definition color screen	Support WIFI LAN + remote connection
360° screen rotation	Support Modbus communication
Support screen saver function (clock + weather)	Support Android/IOS mobile APP
Support WeChat notification function	Multiple interface styles
Support remote data recording function	

3.Panel description

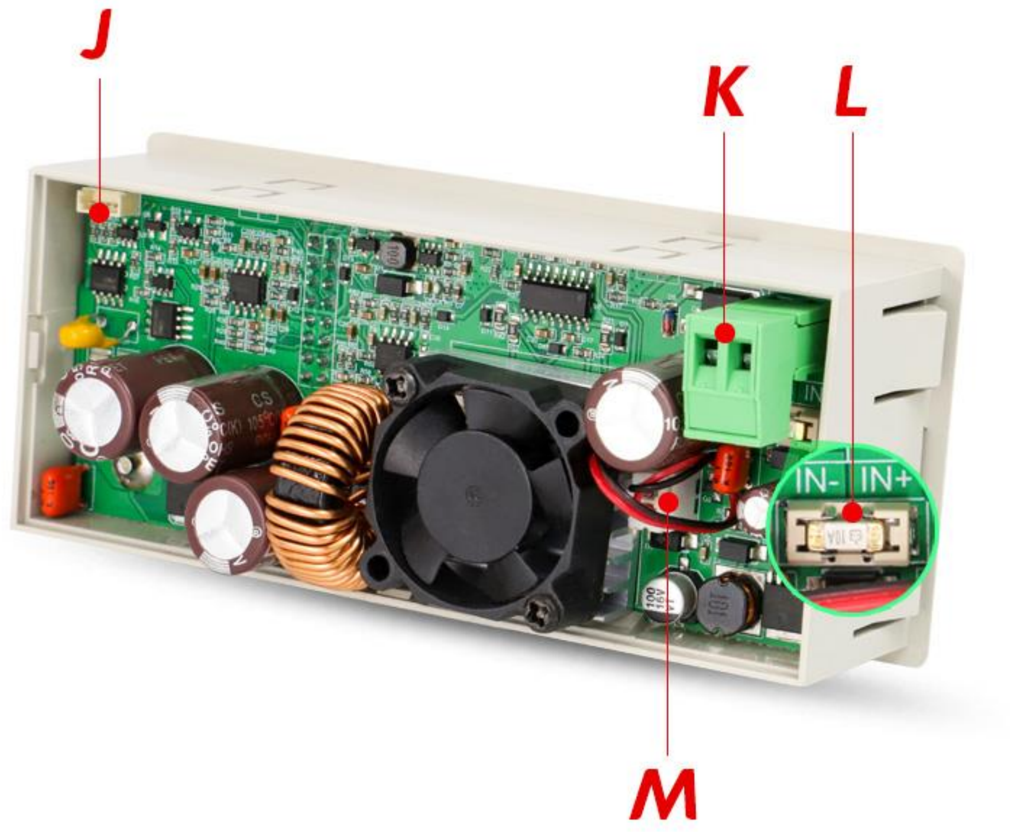
3.1 Front panel



A: Output switch key/power switch	B: Power output positive
C: Power output negative	D: 1.8 inch display screen
E: Rotary encoder/button	F: Voltage setting
G: Current setting	H: Left arrow key
I: Right arrow key	

3.2 back panel





J: TTL communication module interface (can be connected to our power supply WIFI module)	K: Power input interface
L: Input fuse	M: Fan interface

Precautions:

The power input interface must be connected to a stable 6-70V DC. When the input voltage is greater than 72V, the output will be automatically turned off and an alarm (as shown in the right picture) will be automatically turned off. When the input voltage exceeds more, the product will be directly damaged and cannot be repaired!

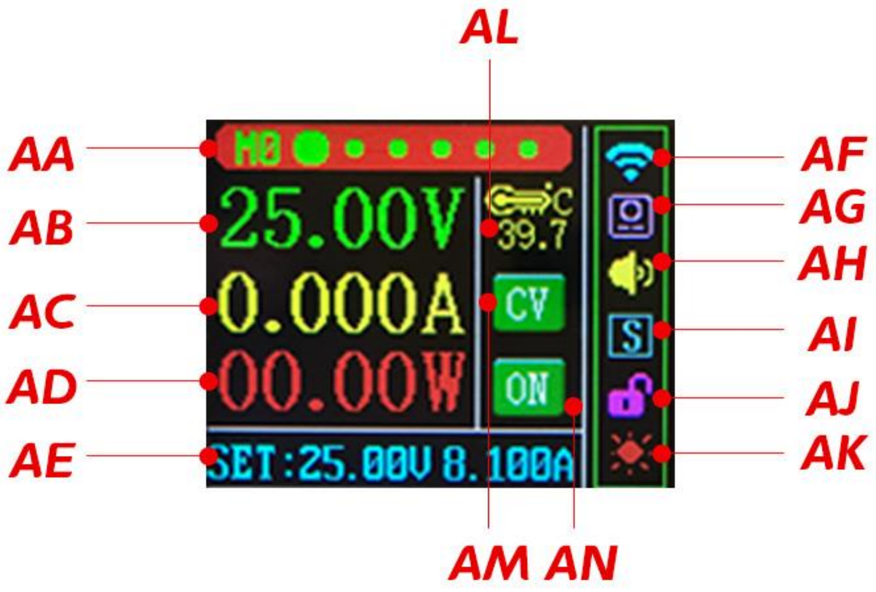
4. Product operation instructions

The product operation interface is mainly divided into 6 interfaces, including the main interface, capacity recording interface, voltage / current curve, power supply parameter interface, system parameter interface and distribution network interface, as well as the system status bar on the left; Press 'ON / OFF' button short, turn on and off the power output, long press 'ON / OFF' button for 2 seconds, turn off the power supply, rest screen / enter screensaver mode, ON / OFF button indicator light to enter the breathing light state.

Rotate the coding potentiometer / left and right button for quick page turning.
Press the left and right buttons for 2 seconds to rotate the screen 360 in four directions.

4.1 main interface

4.1.1 Interface details



The following is an introduction to the interface elements

AA: Interface index and data group	AF: WIFI status
AB: output voltage	AG: IR remote control status
AC: output current	AH: Buzzer status
AD: output power	AI: Shift key status
AL: Product temperature	AJ: lock/unlock status
AM: CC / CV and alarm code indication	AK: Screen status
AN: ON/OFF display	AE: Set the voltage and current

4.1.2 How to set voltage/current

There are 3 ways to set voltage/current arbitrarily

1. Shortcut:

1) Press the V-SET / I-SET button short to enter the voltage / current setting state;

2) It can be shifted through the left and right buttons;

3) The rotary encoder changes the output voltage / current value. After the parameters are confirmed, briefly press the V-SET / I-SET button to exit the setting and save it;

2. Encoding potentiometer method:

1) Press the encoding potentiometer button short to activate the parameters to be set (voltage / current);

2) Switfull and bit selection by short pressing the coding potentiometer button;
After full selection, all the reverse blue will be displayed, and the set voltage / set current is switched by rotating the encoder;
After bit selection, the corresponding bits will display in reverse blue and set the parameters by rotating the encoder;

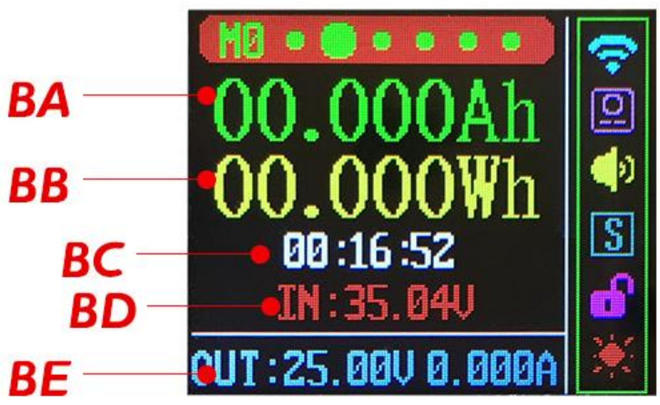
3) After the setting is completed, long pressing the coding potentiometer button for 2 seconds or more than 6 seconds will automatically exit the setting; all parameters will be automatically saved after the exit.

3. Remote control method:

The voltage and current can be set through the numeric keypad of the remote control (for details, see...)

4.2 Capacity record interface

4.2.1 Interface details



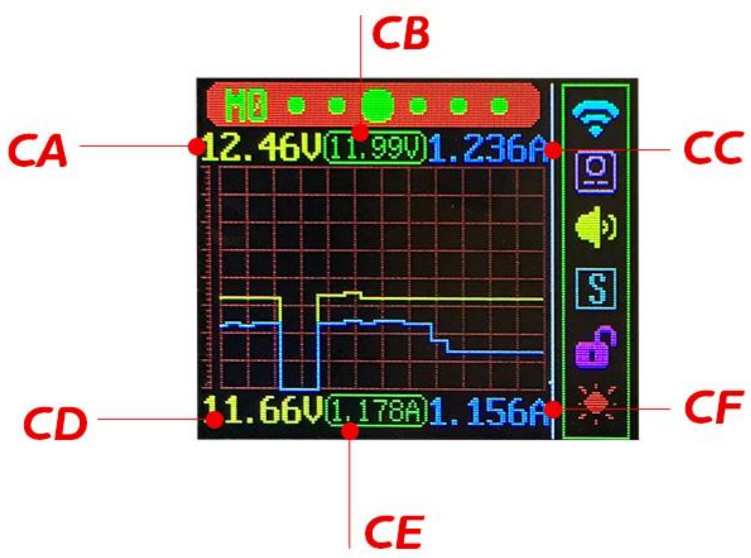
The following is an introduction to the interface elements

BA: Capacity	BB: Energy
BC: time	BD: Input voltage
BE: Output voltage and current	

4.2.2 How to clear capacity Ah|Energy Wh|Time data

1. Short press the encoder to enter the data clearing function;
2. Switch the data that needs to be cleared through the rotary encoder;
3. After the parameters are determined, clear the data by short pressing the encoder;;

4.3 Voltage/current curve



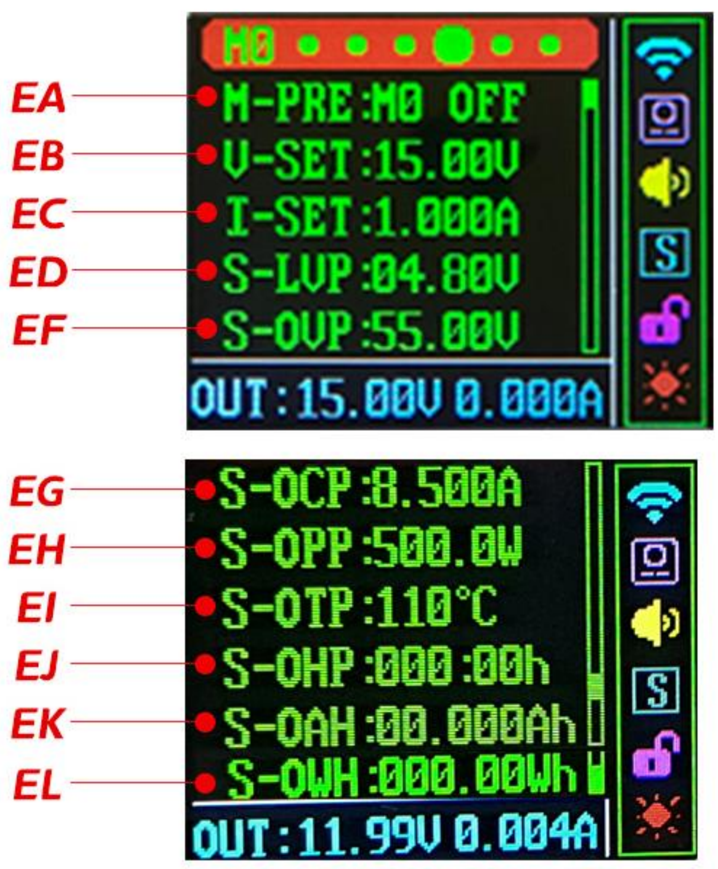
The following is an introduction to the interface elements

CA: Voltage upper limit	CD: Voltage lower limit
CB: output voltage	CE: output current
CC: Current upper limit	CF: Current lower limit

Short press the code potentiometer button to pause/start curve writing

4.4 Data group interface

4.4.1 Interface details



The following is an introduction to the interface elements

EA	M-PRE: M0~9 data group serial number	EA	OFF: the output is turned off by default ON: the output is turned on by default
EB	V-SET: Set the voltage value	EC	I-SET: Set current value
ED	S-LVP: Input undervoltage protection	EF	S-OVP: Output overvoltage protection
EG	S-OCP: Output overcurrent protection	EH	S-OPP: Output over power protection
EI	S-OTP: High temperature protection	EJ	S-OHP: Maximum output time (0 not enabled)
EK	S-OAH: Maximum output capacity (0 not enabled)	EL	S-OWH: Maximum output energy (0 not enabled)

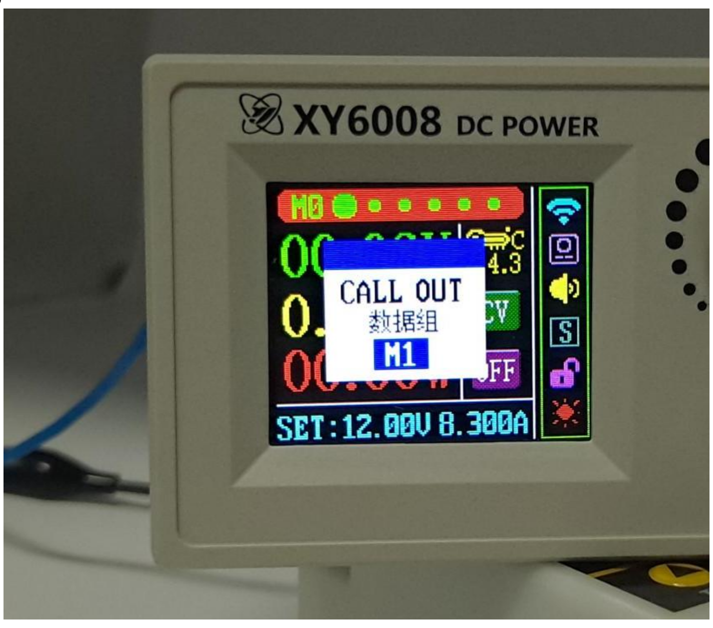
4.4.2 How to view and modify the data group

This product has a total of 10 sets of data from M0 to M9. The specific methods for viewing and modifying are as follows:

1.Short press the encoder to enter the setting state, select the "M-PRE" parameter;
2.Short press the encoder or right button to enter the parameter setting, and switch to "M0" by shift operation;
3.Modify the M0 serial number through the rotary encoder, then you can call up the corresponding data group;
4.If you want to modify the data of the data group, you can switch to the parameter option on the left through the shift operation; you need to view the modified parameter through the rotary encoder switch
5.Long press the encoder for more than 2 seconds to exit and save;

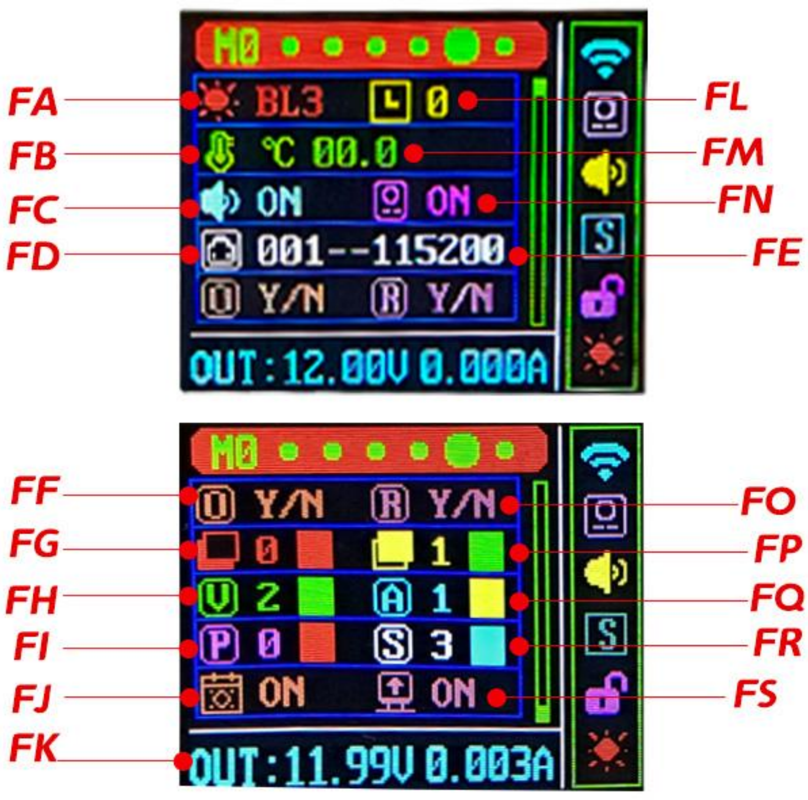
4.4.3 How to quickly call up the data set

1. In the non-setting state, press and hold the V-SET/I-SET button for 2 seconds to call up the data group function;
2. Modify the data serial number (1~9) through the rotary encoder;
3. Continue to long press V-SET/I-SET to cancel the operation, short press the encoder to call up the selected data group;



4.5 System parameter interface

4.5.1 Interface parameter introduction



The following is an introduction to the interface elements

FA	5 levels of backlight brightness BL1~BL5	FL	Screen rest time 0-9 minutes, 0: the screen is always on
FB	Temperature unit ℃/℉	FM	Temperature correction value -10.0~10.0℃
FC	Buzzer switch	FN	Infrared remote control switch
FD	Modbus slave address 1~247	FE	Baud rate 9600 ~ 115200
FF	System zero	FO	Restore Factory
FG	Index background color	FP	Index foreground color
FH	Voltage font color	FQ	Current font color
FI	Power font color	FR	Set voltage and current color/bottom output voltage and current font color
FJ	Screen saver function switch (only for WiFi version)	FS	Boot animation switch

4.5.2 How to zero

1. Short press the encoder to enter the setting state, at this time the bottom of the selected parameter turns blue;
2. Use the ← → button or the rotary encoder to switch the "FF" zero calibration that needs to be modified;
3. Short press the encoder to enter the zero calibration interface, select "-YES-" through the rotary encoder, then short press the encoder to exit, the product will automatically perform the voltage and current zero calibration operation;



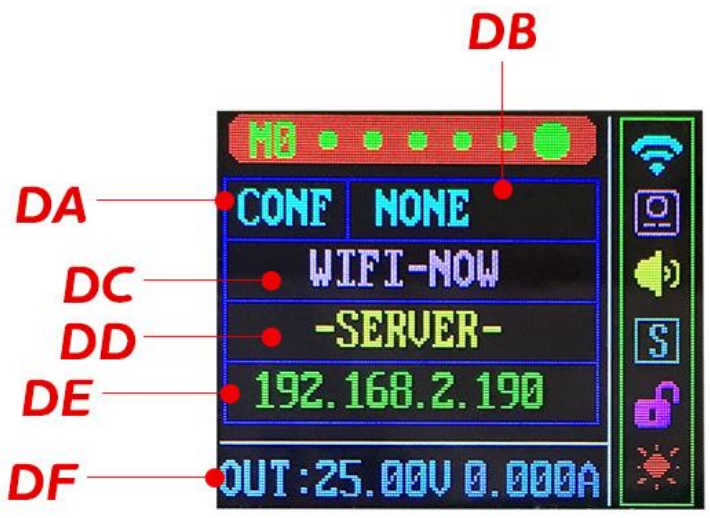
Note: Complete in OFF

4.5.3 How to restore the factory

1. Short press the encoder to enter the setting state, at this time the bottom of the selected parameter turns blue;
2. Use the ← → button or the rotary encoder to switch the "FO" that needs to be modified to restore the factory;
3. Short press the encoder to enter the factory restoration interface, select "-YES-" through the rotary encoder, and then short press the encoder to exit, the product will automatically restore the factory operation;

4.6 Distribution network interface

4.6.1 Distribution network page details



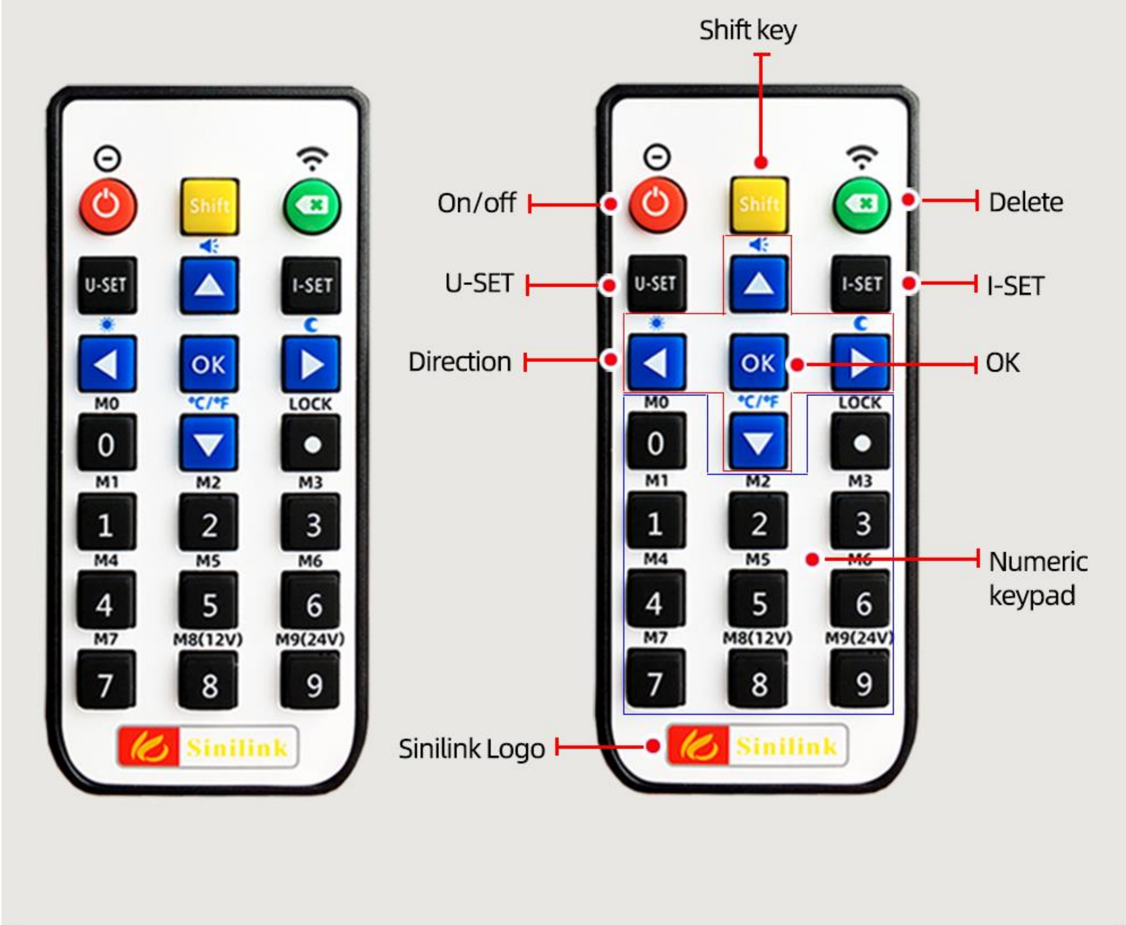
The following is an introduction to the interface elements

DB	Set the WiFi module pairing mode NONE: No operation TOUCH: Quick pairing mode AP: Compatible pairing mode
DD	The status of the current WiFi module TOUCH: Quick pairing mode AP: Compatible pairing mode ROUT: Router connected SERVER: Successfully networked
DE	IP Address

4.6.2 Modify WiFi module status through power products

1. After entering the network configuration interface, short press the encoder to enter the setting state;
2. Switch the pairing mode "TOUCH" "-AP-" through the rotary encoder
3. Long press the encoder for 2 seconds to select and exit, the WiFi module enters the pairing mode, and the status of the WiFi module can be judged by "WIFI-NOW";

4.7 Remote control function introduction



Key and function description

ON/OFF	(power key)	Turn on/off power output	Delete	(delete key)	Delete/return
U-SET	U-SET	Set voltage	I-SET	I-SET	Set current
Shift	Shift	Function key Shift	OK	OK	Confirm/select
Direction	◀ ▶ ▲ ▼	Up and down adjustment, left and right shift/page turning			
Numbers	0 ● 9	Digital input: For example, to set the voltage, click U-SET and click OK on the numeric keyboard "12.5" to complete the voltage setting operation			
Shift+	(power key)	Power on/off	Shift+	(delete key)	Fast distribution network
Shift+	▲	Turn on and off the buzzer	Shift+	▼ (°C/°F)	Switching between Celsius ℃ and Fahrenheit °F
Shift+	◀	Brightness adjustment (B0~B5, 6-block brightness)	Shift+	▶ (C)	Set screen off time (0-9 minutes)
Shift+	● (LOCK)	Lock/unlock keys	Shift+	0 (M0) ...... 9 (M9(24V))	Quickly recall data group M0~M9

Note: 1: Brightness adjustment B0~B5 can directly input the numbers "0~5" or adjust by "▲ ▼".

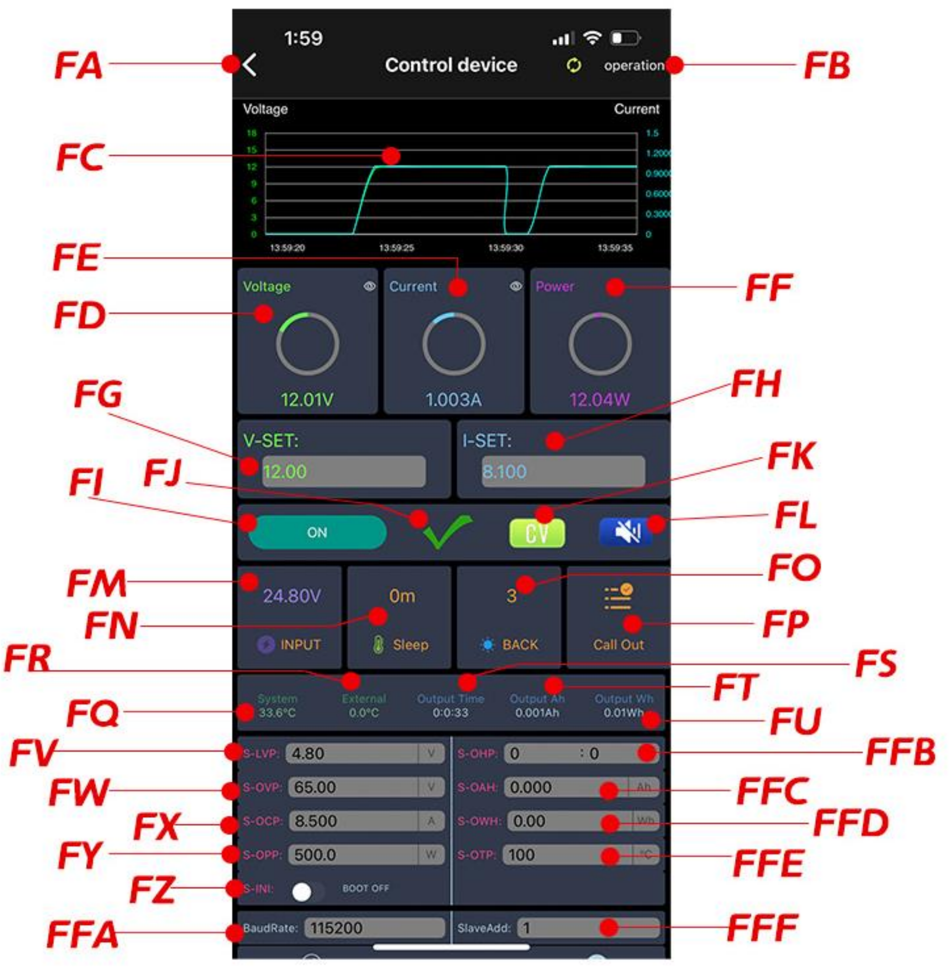
2: The screen-off time (0-9 minutes) can be directly input the number "0-9" or can be adjusted by "▲ ▼".

3: M8/M9 are 12V/24V for quick transfer, used for 12V/24V electric soldering iron temperature adjustment or fan speed adjustment.

5.Android IOS

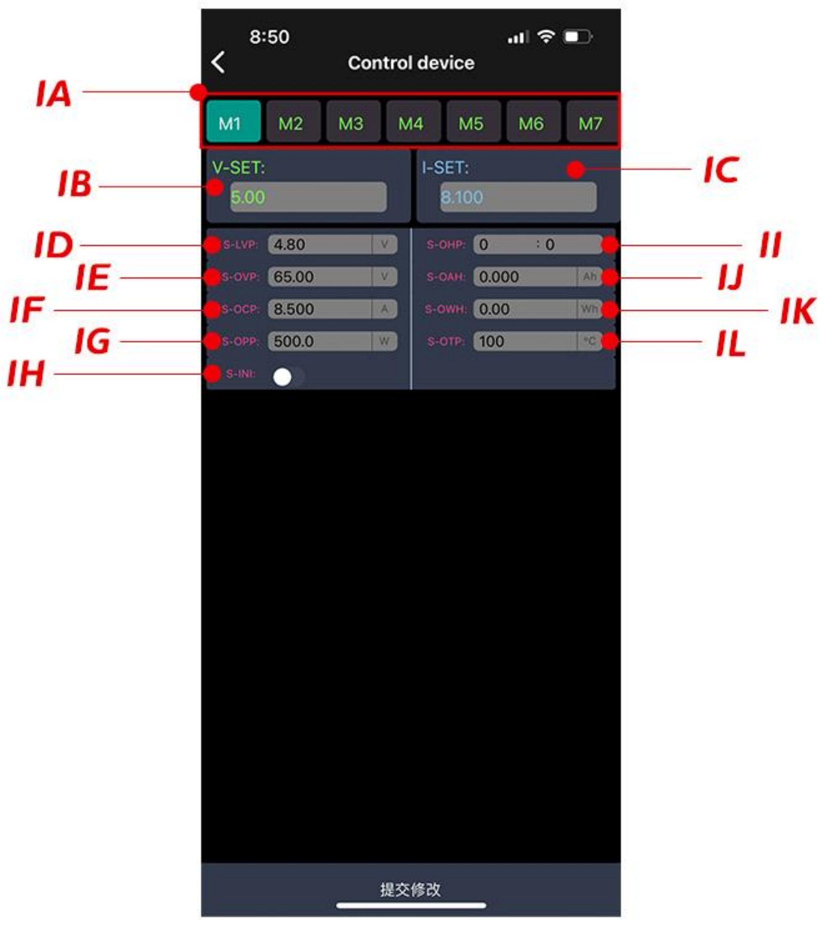
When using the APP function, you must first ensure that the baud rate and device address parameters of the WiFi module must be consistent with the baud rate and device address of the product. The WiFi module and the power supply communicate through the modbus protocol;

5.1 APP Operation interface



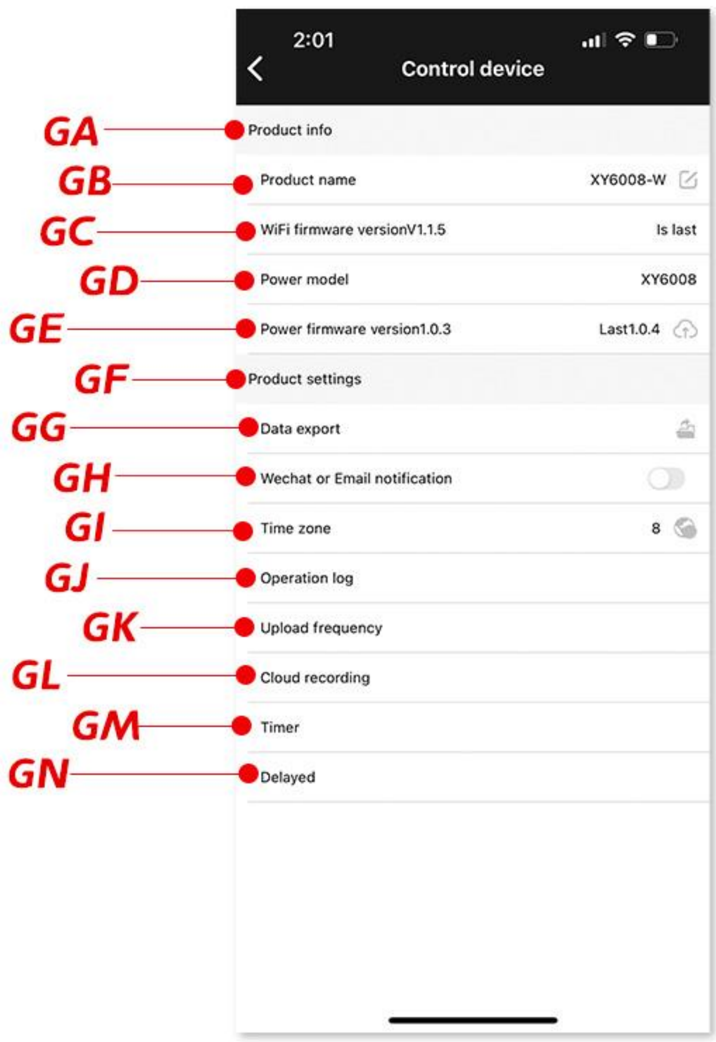
FA	Exit button	FL	Buzzer switch
FB	Set button	FM	Input voltage
FC	Voltage current curve	FN	Sleep time
FD	The output voltage	FO	LCD backlight
FE	Output current	FP	Data group recall
FF	Output Power	FQ	Product temperature
FG	Set constant pressure value	FR	External probe temperature
FH	Set constant current value	FS	Output time statistics
FI	switch	FT	Output capacity statistics
FG	Alarm code indication	FU	Output energy statistics
FK	Constant pressure and current indication		
FV	Input undervoltage protection	FFB	Maximum output time (zero turn off this function)
FW	Output overvoltage protection	FFC	Maximum output capacity
FX	Output overcurrent protection	FFD	Maximum output energy
FY	Output over power protection	FFE	High temperature protection
FZ	Power-on default output status		
FFA	WiFi module baud rate	FFF	Slave address
FFB	Device sharing function	FFC	View and modify the data group

5.1.2 Data group function



IA	Data group index		
IB	Set constant pressure value	IC	Set constant current value
ID	Input undervoltage protection	II	Maximum output time (zero turn off this function)
IF	Output overvoltage protection	IJ	Maximum output capacity
IE	Output overcurrent protection	IK	Maximum output energy
IG	Output over power protection	IL	High temperature protection
IH	Power-on default output status		

5.1.3 Power setting interface

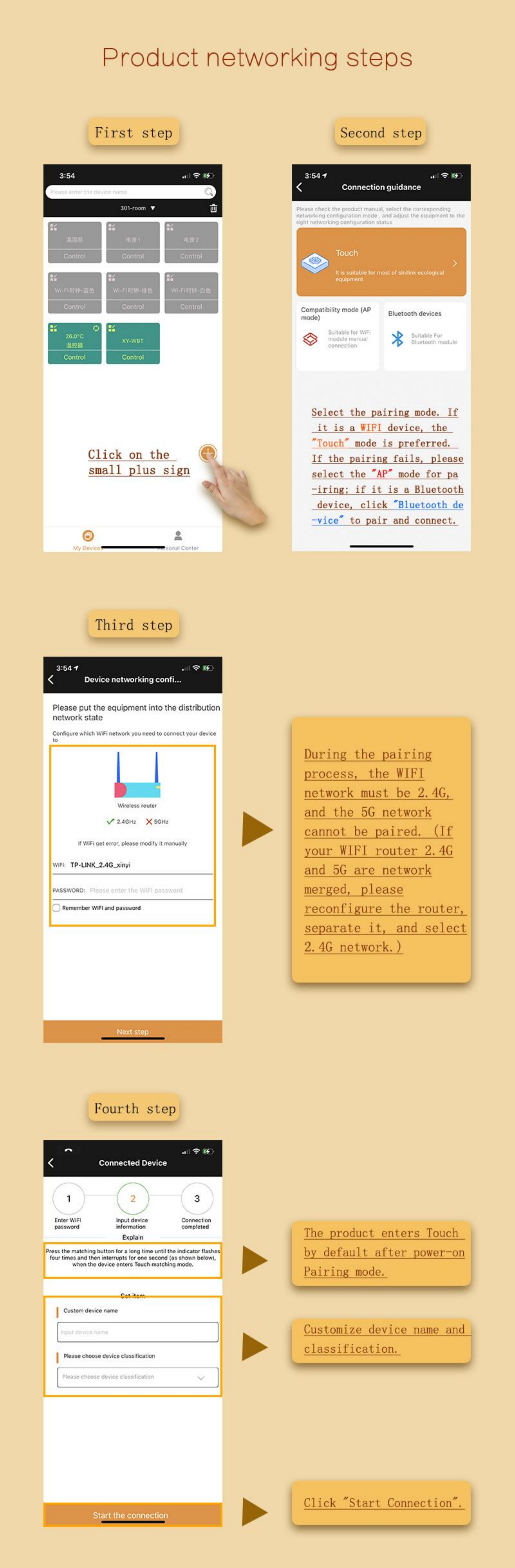


GA	product information	GH	Alarm WeChat notification switch
GB	The name of the WiFi module	GI	Time zone setting
GC	The version number of the WiFi module	GJ	Operation log record
GD	Power supply model	GK	Cloud data upload frequency
GE	Power supply version number	GL	Cloud data viewing
GF	Product Setting Bar	GM	Timing function
GG	LAN data export	GN	Delay function

5.2 How to distribution network

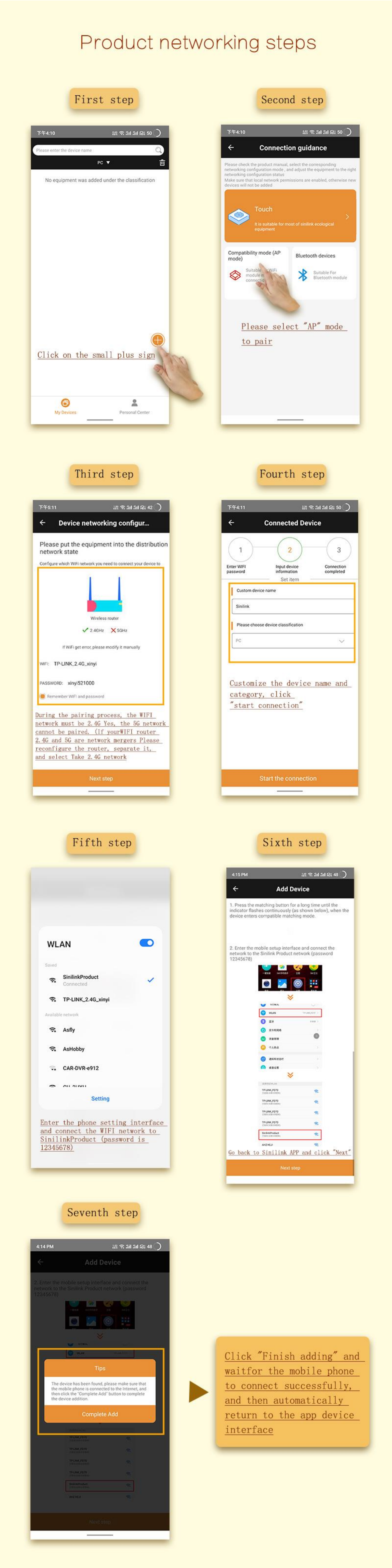
5.2.1 Touch Paired mode

Long press the WiFi button for more than 5 seconds, let the product enter the Touch pairing state, the blue lights flash 4 times in 1 seconds interval, so reciprocating;



5.2.2 APPaired mode

Press the product button for more than 5 seconds to let the product into the compatible mode (AP mode) pairing state. Blue lights continuously flash;



5.2.3 Verify WiFi communication with product

After the WiFi module is successfully added, open the operation interface to ensure that the port rate of the WiFi module, the value of the setting address and the device address, so that the WiFi module can establish communication with the product; if the successful power product will display the WiFi icon;

5.3 Advanced functional applications

5.3.1 How to open a mailbox notification

Enter the WiFi module operation interface, click the "Operation" button in the upper right corner, enter the product Setup interface; click the mailbox notification to turn on or off this function. When the mailbox notification is opened, the alarm during the product operation will actively inform the user through the mailbox, so as to facilitate customers to accept the status of the product, in real time;

5.3.2 Operation log

When the switch status of the product changes, the WiFi module will upload the switch change time and the type of operation to the server, making it easy to view and analyze the product switch operation;



5.3.3 Cloud data records

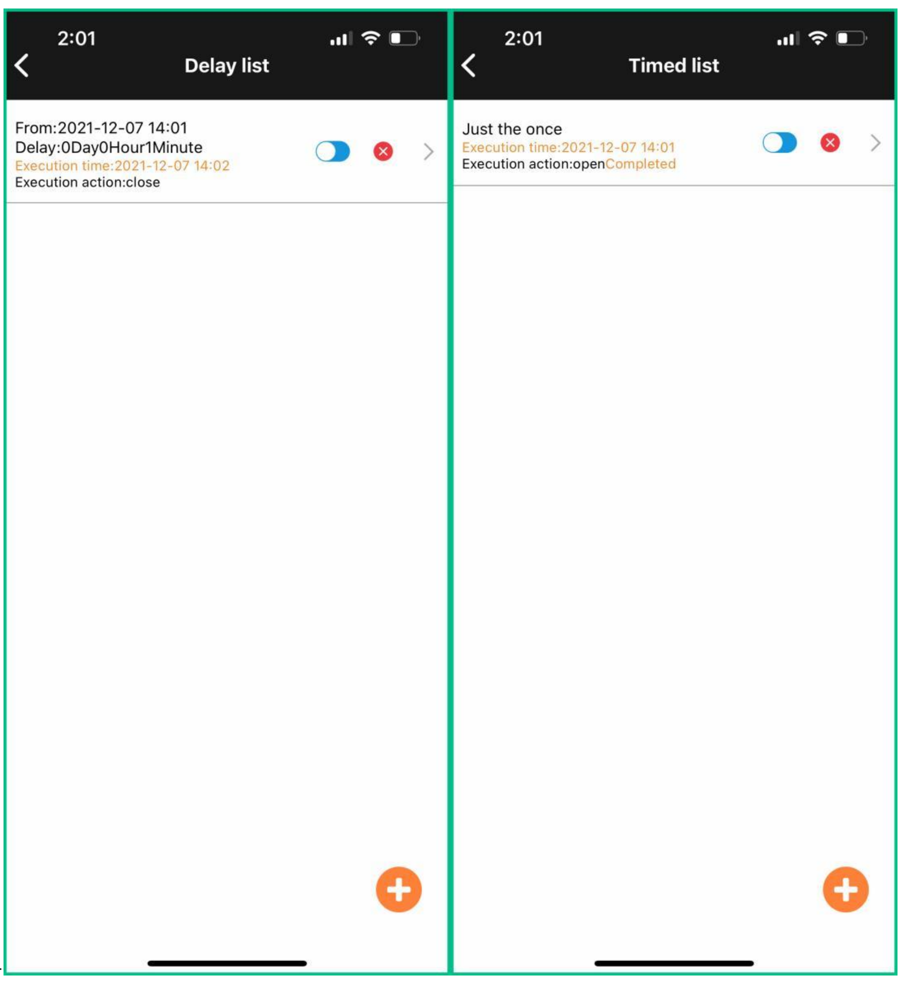
When the output is turned on, the WiFi module uploads the output voltage and output current of the product to the server in real time, and supports one upload in 1 second, which is a sharp tool for product later analysis, and will support the export of data for any period of time for more complex data processing analysis;



Time	V	A
2021-12-07 14:01:57	12.01	1.003
2021-12-07 14:01:56	12.00	1.003
2021-12-07 14:01:55	12.00	1.003
2021-12-07 14:01:54	12.01	1.003
2021-12-07 14:01:53	12.00	1.002
2021-12-07 14:01:52	12.01	1.003
2021-12-07 14:01:51	12.01	1.003
2021-12-07 14:01:50	12.00	1.003
2021-12-07 14:01:49	12.00	1.003
2021-12-07 14:01:48	12.01	1.003
2021-12-07 14:01:47	12.01	1.003
2021-12-07 14:01:46	12.01	1.003
2021-12-07 14:01:45	12.01	1.003
2021-12-07 14:01:44	12.00	1.003
2021-12-07 14:01:43	12.01	1.003
2021-12-07 14:01:42	12.01	1.003
2021-12-07 14:01:41	12.01	1.003
2021-12-07 14:01:40	12.00	1.003
2021-12-07 14:01:39	12.00	1.003

5.3.4 Time delay function

Support regularly on and off the product output, and can choose any repeat mode, powerful;



6.Mailbox notification function

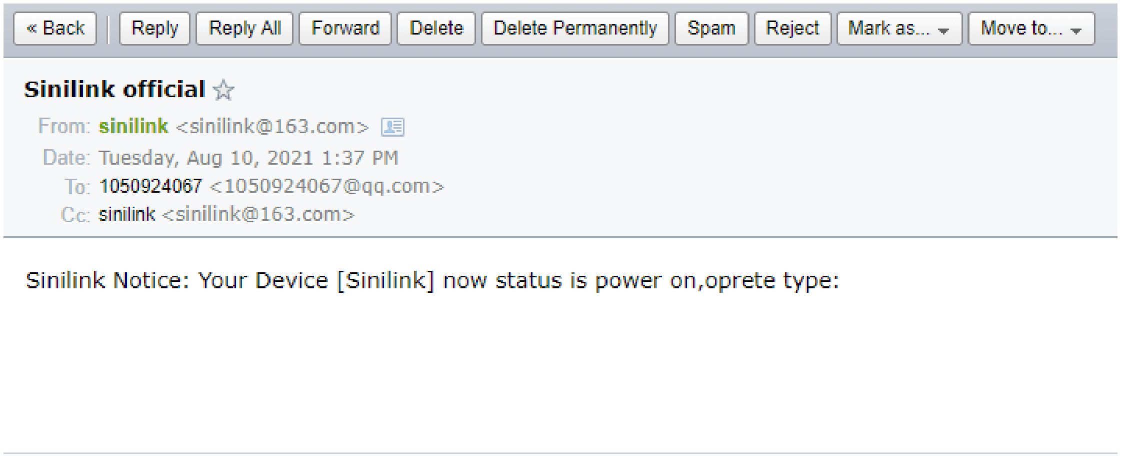
6.1Mailbox notification function

1) Turn on the mail notification



1. Open the APP into the device operation interface, the top left corner is the switch of the mail notification function; if the email notification is turned on, when the computer status sends the change will send the latest status and operation type of the computer in real time through the mailbox used to register the APP;

Operation types are divided into five types: 1. Equipment power 2. Key operation 3. Timer operation 4.APP operation 5. Point operation operation; as shown in the figure below





6.2 Turn on the mailbox notification function for the device

1. Open the Xinyi Lian APP, find the added thermostat device, and enter the operation interface;
2. In the top right corner has a "WeChat | email notification" switch, set to "open" you can receive the product mailbox notification;
3. When operating the product or calling the alarm, it will actively send an email notification;

7.The Windows upper-position computer

7.1 communication mode

The upper position computer supports two communication modes: WiFi, serial port TTL;
WiFi: It can realize LAN wireless transmission and external network remote control. First, we can add products with Xinyi Lian APP, and then we must ensure that both computers and products can be connected;
Serial port TTL: Connect the product directly through USB to serial port module without network;
The above two ways can meet most of the application scenarios;

7.2 Interface introduction

WiFi



serial port



8.How to download a mobile APP

扫码下载APP

Scan Download APP

Scan the code to download the APP, foreign customers please download in the Google market, search for 'sinilink' to download